DEC STD 059-0 INCOMING INSPECTION REQUIREMENTS

DOCUMENT IDENTIFIER: A-DS-EL00059-00-0 Rev C2, 07-Aug-1989

ABSTRACT: This document establishes the minimum requirements where Incoming Inspection is used to measure purchased part quality level.

APPLICABILITY: This standard is mandatory for Component Engineers when introducing a purchased part into the Corporation, or when any function creates incoming inspection procedures.

STATUS: Approved 13-Feb-1987; type $ VTX SMC for expiration date.

This document is confidential and proprietary. It is an unpublished work protected under the Federal copyright laws.

© Digital Equipment Corporation. 1989. All rights reserved.

DEC STD 059-0 INCOMING INSPECTION REQUIREMENTS

DOCUMENT IDENTIFIER: A-DS-EL00059-00-0 Rev C2, 07-Aug-1989

REVISION HISTORY:	Rev A,	29-Mar-1971	
	Rev B	23-Jul-1981	ECO #MLO01
	Rev C	19-Jan-1984	ECO #APO02
	Rev C1	13-Feb-1987	ECO #LJO03
	Rev C2	07-Aug-1989	ECO #CTS04

Document Management Category:	Component Incoming Inspection (MCI)
Responsible Department:	Functional Component Engineering
Responsible Person:	Paul Rey
Authors:	

APPROVAL: This standard has been approved by the Component Engineering Managers' Committee* for use throughout Digital. Revision C2 incorporates clerical updates and reformatting only.

Paul Rey, Functional Component Engineering Manager

Eric Williams, Standards Process Manager

Direct requests for further information to:

Paul Rey

NRO5/I4, DTN: 234-4380, SKYHWK::REY

Copies of this document can be ordered from:

Standards and Methods Control

$ VTX SMC, JOKUR::SMC, DTN: 287-3724, or CTS1-2/D4

Please provide your name, mailstop, cost center, badge number, date of hire, and node address when ordering.

***Component Engineering Managers Committee**

Terminals & Small Systems Component Engineering Manager
Computer Systems Manufacturing (CSM) Component Engineering Manager
Storage Systems East - Component Engineering Manager
Storage Systems West - Component Engineering Manager
GIA Component Engineering Manager
Distributed Systems Manufacturing (DSM) Component Engineering Manager
European Component Engineering Manager
Large Scale Integration (LSI) Acquisition and Test Component Engineering Manager

For the specific names of the managers, refer to Functional Component Engineering in the *Internal Guide to Digital Organizations*, EL-ENGRS-OM.

CONTENTS

1 INTRODUCTION 1
1.1 PURPOSE 1
1.2 RESPONSIBILITIES 1
1.2.1 Component Engineering 1
1.2.2 Central Specification Control Systems 1
1.2.3 Site Design Library or Document Control Group 1
1.2.4 Incoming Inspection Procedure (IIP) Originator 2
1.2.5 Quality Managers 2

2 REQUIREMENTS 2
2.1 PURCHASED MATERIALS AND PARTS 2
2.2 SHIP-TO-STOCK, VENDOR CERTIFICATION, VENDOR TEST 3
2.3 EXCESS AND INTERPLANT TRANSFERS 3
2.4 DIGITAL MANUFACTURED PARTS 3
2.5 INCOMING INSPECTION DOCUMENTATION 3
2.6 INSPECTION AREA OPERATING PROCEDURE 3

3 TEST REQUIREMENTS/TEST METHOD CONTROL 3
3.1 TEST REQUIREMENTS FILE (TRF) 4
3.1.1 Organization 4
3.1.2 Format 5
3.1.3 Document Control 5
3.2 TEST METHODS 7
3.2.1 Organization 7
3.2.2 Format 7
3.2.3 Document Control 12

4 INCOMING INSPECTION PROCEDURE CONTROL 12
4.1 FORMS 12
4.2 DOCUMENTATION IDENTIFIER 12
4.3 APPROVAL, DISTRIBUTION, AND STORAGE 12
4.4 REVISION CONTROL 12
4.5 INSPECTION PROCEDURE EXAMPLE 12

Appendix A REFERENCED DOCUMENTS 19

A.1 Digital Forms 19

A.2 Government Documents 20

FIGURES

1	Qualified Vendor Listing (QVL) Sample	2
2	Test Requirement File Sample	6
3	Incoming Inspection Test Method Sample - (Sheet 1 of 4)	8
4	Incoming Inspection Test Method Sample - (Sheet 2 of 4)	9
5	Incoming Inspection Test Method Sample - (Sheet 3 of 4)	10
6	Incoming Inspection Test Method Sample - (Sheet 4 of 4)	11
7	Incoming Inspection Procedure - Release Procedure	13
8	Incoming Inspection Procedure Example - Sheet 1 of 4	14
9	Incoming Inspection Procedure Example - Sheet 2 of 4	15
10	Incoming Inspection Procedure Example - Sheet 3 of 4	16
11	Incoming Inspection Procedure Example - Sheet 4 of 4	17

1 INTRODUCTION

It is part of Digital Equipment Corporation's Quality Policy to maintain a well-defined system to ensure the incoming quality level of purchased parts that become integrated into its manufactured products.

1.1 PURPOSE

This standard establishes the responsibilities and requirements necessary to create the documentation needed to perform incoming inspection.

1.2 RESPONSIBILITIES

1.2.1 Component Engineering

Responsible individuals identified at the Corporate, Group, or Plant level are responsible for accurate Purchase Specifications and for the qualification process used to establish vendor and part adequacy.

Component Engineering is also responsible for ensuring that the minimum documentation requirements of this standard are met. This is done by establishing the minimum test requirements for each purchased component class defined in DEC STD 012.

NOTE

For integrated circuits (classes 19, 21, and 23), a Test Directory is available from the LSI Acquisition and Test Group.

The component engineer provides the information needed for Central Specification Control Systems to maintain the current list of approved vendors and parts as found in the Qualified Vendor List (QVL), a subsystem of the Specification Control Data Base (SCDB). An example of the QVL is shown in Figure 1.

1.2.2 Central Specification Control Systems

Central Specification Control Systems is responsible for assigning document identifiers, as well as writing, releasing, distributing, and archiving Test Method documents. Central Specification Control Systems is also responsible for distributing and archiving purchased component related (excluding class codes 70 and 74) Incoming Inspection Procedures if not done by the plant's design library or document control group.

1.2.3 Site Design Library or Document Control Group

The design library (or document control group) at each site is responsible for distributing and archiving site specific Incoming Inspection Procedures.

Figure 1: Qualified Vendor Listing (QVL) Sample

```
       REPORT 5260CT                                    DIGITAL EQUIPMENT CORPORATION -  SPEC CONTROL SYSTEM

                                                                  OFFICIAL QUALIFIED VENDOR LISTING

PART NUMBER              PART DESCRIPTION                  RATINGS RQ   EWS     ST         FCD     II NUMBER     INS
  VENDOR CODE   QL           VENDOR NAME                      VENDOR PART NUMBER          UL FILE UL GUIDE       CSA FILE NUM

10-01612-01     .01       MFD    100 .80-20%       DI      YYYYYYY PO    G      A          AE      10-000000-0-0     L
    3026-003            CENTRALAB INC                       2DDU60F103MAA
    4964-001            MURATA ERIE  NORTH AMERICA  INC    DD109B13Y5V103Z100V
    4964-001            MURATA ERIE  NORTH AMERICA  INC    DD610B301Z5U103Z100V
    4964-002            MURATA MFG CO LTD                   DD610NW421Z5U103Z100
   42508-000            TUSONIX INC                         805537Z5U0103AH
   46583-000            CERAMIC CORP                        562CFB101AF103ZA02


10-01631-00     390.0     MMF   100 5%200PPM        MI      YYYYYYY PO    G      A          AD      10-00000-0-0
     112-000            CORNELL-DUBILIER ELECTRIC CORP      CDS15FA391-05-3-C
    1354-002            SAGAMO CAPACITOR                    2129-00390-05-3-C
   28497-000            KAHGAN ELECTRONICS                  MS15391J101
      35-000            ARCO ELECTRONICS INC                SCDM15-391J
   38381-000            A D  I ELECTRONICS INC              SCDM15-391J
   43216-000            SOSHIN ELECTRONIC CO LTD            DM15C 391J1


90-09877-01     SCREW, SPADE, INSUL. 22-16AWG               YYYYYYY Y2    G      A          7Y      90-2SPEC-0-0
    1482-002            BURNDY CORP.
    2901-001            PARKER KALON


NOTE:  This is sample data to show the type of data provided in the Qualified Vendor Listing.
       Contact Central Specification Control Systems to determine best method to obtain current data.
```

1.2.4 Incoming Inspection Procedure (IIP) Originator

Incoming Inspection Procedures may be originated at the Corporate, Group, or Plant level. The IIP Originator is responsible for following the requirements of this Standard, as well as obtaining the proper approvals, ensuring adequate sampling plans, and adhering to the minimum test requirement file requirements.

1.2.5 Quality Managers

Quality Managers (Corporate, Group, or Plant) are responsible for approving IIPs as required by Manufacturing Quality Plans.

2 REQUIREMENTS

2.1 PURCHASED MATERIALS AND PARTS

All materials and parts that are purchased by Digital shall be processed through an incoming inspection area and submitted to a documented series of tests to verify conformance to the respective purchase specification or engineering drawing. Exceptions are materials and parts that are not incorporated into a Digital manufactured product, or items purchased under an alternate quality verification method (described under subhead 2.2).

2.2 SHIP-TO-STOCK, VENDOR CERTIFICATION, VENDOR TEST

Alternate methods used to ensure the quality level of purchased materials, such as Ship-to-Stock (per *Ship-To-Stock Supplier Qualification Program - Audit Guideline for Plant Quality Engineer*, A-SP-ELMF347-00-0, and *Ship-To-Stock Supplier Qualification Program Basic Agreement and Release Procedure and Vendor Test Programs*, A-SP-ELMF348-00-0, must be documented. If incoming inspection is reduced or replaced by an alternate program, that program's approved documentation satisfies the requirements of this standard.

2.3 EXCESS AND INTERPLANT TRANSFERS

Plant quality organizations establish the policy for dispositioning (For example: accept, rework, reject) material or parts on an individual basis.

2.4 DIGITAL MANUFACTURED PARTS

Parts manufactured by one Digital plant and supplied to another Digital plant are treated as "interplant transfers" unless otherwise designated by the receiving plant quality organization.

2.5 INCOMING INSPECTION DOCUMENTATION

When material is to be subjected to incoming inspection, documentation must be available or generated defining the attributes to test, as well as the tooling and equipment required, sample size, sample plans to use, and the purchase specification or drawing specifying the part.

The inspection documentation can be in one of two forms, depending on the part category and information available to the incoming inspection area. The two forms are:

a. Test Requirement/Test Method documentation; (Subhead 3 of this standard defines the use and control of this method).

b. Incoming Inspection Procedures (IIP); (Subhead 4 of this standard defines the use and control of this method).

2.6 INSPECTION AREA OPERATING PROCEDURE

All incoming inspection areas are required to document their area's "Standard Operating Procedures". These procedures must satisfy the plant's Quality Plan. The process adopted should be auditable in accordance with *Manufacturing Systems Assessment (MSA) Procedure - Checklist*, A-SP-7665326-00-0.

3 TEST REQUIREMENTS/TEST METHOD CONTROL

As a minimum, all incoming inspection areas shall be expected to perform the level of incoming inspection testing specified by this subhead. Incoming inspection areas desiring to do less (for example, loosening sample plans, or eliminating specified tests) must justify and document their deviations, and obtain approval from the next level user of the part and plant quality assurance. Other plant level approvals may be specified in the plant's quality plans.

The incoming inspection test documentation is in a format compatible with PAVES (Part Analysis Vendor Evaluation System). PAVES is a computerized system that supports the automated incoming inspection business in some volume manufacturing plants. In hard copy form, the incoming inspection test documentation can also be used as a manual system.

Two basic documentation elements are involved: the Test Requirements File (TRF) and the Incoming Inspection Test Methods (IITM). They are described in the following subheads.

3.1 TEST REQUIREMENTS FILE (TRF)

This electronic document file (also available in hard copy) lists by part class, FCD (Functional Code Descriptor), or part number the tests to be done and the applicable sampling plan for each test. Tests are identified by name and also by a 2- or 3-character alphanumeric test code.

3.1.1 Organization

The TRF is organized to list test requirements by FILE KEY in one of three ways:

a. By Inventory Class—When the majority of components within a given inventory class have the same test requirements, these requirements are listed in the TRF by class.

For example: FILE KEY:CLASS:17

b. BY FCD—When the majority of components within a given FCD have the same test requirements (which is the normal case), these requirements are listed in the TRF by FCD. FCD codes and meanings are available from Central Specification Control Systems, NRO5/M2, DTN: 234-4952

For example: FILE KEY:FCD:GA

c. By Part Number—Test requirements may also be entered in the TRF against a specific part number.

For example: FILE KEY:P/N:13-16421-01

This is done on an exception basis when the test requirements called out by class or by FCD do not meet the needs for that component. For example, a component requiring a 100% screen for a particular critical parameter would be handled this way instead of using the sampling plan specified for other components of the same FCD.

The FILE KEY order is:

a. Classes in ascending numerical order

b. FCD in ascending numerical and alphabetical order

c. Part numbers in ascending numerical order.

3.1.2 Format

The TRF listing format is shown in Figure 2. The basic elements are:

a. FILE KEY—Shows how the requirements are tabulated: by class, FCD, or part number

b. Date Last Changed—month/day/year

c. Test Description—Name of test

d. Test Code—Unique alphanumeric code for the test. This code is indexed to a supporting Incoming Inspection Test Method, as described in subhead 4.

e. Quality Level—The sampling plan to be used in terms of AQL (Acceptance Quality Level), LTPD (Lot Tolerance Percent Defective), or 100% sort. From the information in this column, the sample size and accept/reject numbers can be obtained from tables in MIL-STD-105D (Normal, Level 2, AQL Single Sampling plans) or MIL-S-19500F, Appendix C (Normal, LTPD single sampling plans). PAVES plants have these tables stored in the computer.

3.1.3 Document Control

Incoming Inspection Test Requirement File, A-SP-ELCE059-TR-OTRF is available in hard copy from Standards and Methods Control, CTS1-2, DTN: 287-3724, JOKUR::SMC. Control and distribution of the electronic file for use in Plant PAVES systems is administered by Central Specification Control Systems, NRO5/M2, DTN:234-4950.

Figure 2: Test Requirement File Sample

```
------------------------------------------------------------------------
   FILE KEY: FCD       CLASS: 17       TESTS ARE IN SEQUENCE BY TEST CODE
                                             DATE LAST CHANGED: INITIAL

-- - TEST-DESCRIPTION ---------- CODE QUALITY-LEVEL.
(01) VISUAL                      2A    LTPD: 20-0
(02) MECHANICAL DIM              2B    LTPD: 20-0
```

A. EXAMPLE OF TRF LISTING BY INVENTORY CLASS CODE

```
   FILE KEY: FCD: 1C                 TESTS ARE IN SEQUENCE BY TEST CODE
                                             DATE LAST CHANGED: INITIAL

-- - TEST-DESCRIPTION ---------- CODE QUALITY-LEVEL.
(01) VISUAL                      2A    LTPD: 20-0
(02) MECHANICAL DIM              2B    LTPD: 20-0
(03) MARKING                     2C    LTPD: 20-0
(04) SOLDER HEAT                 2D    LTPD: 20-0
(05) SOLDERABILITY               2E    LTPD: 20-0
(06) FLAMMABILITY                2N    LTPD: 90-0
(07) IN/WITHDRAW FORCE           5BD   LTPD: 50-0
```

B. EXAMPLE OF TRF LISTING BY FUNCTIONAL CODE DESCRIPTOR

```
   FILE KEY: P/N: 13-11737-00        TESTS ARE IN SEQUENCE BY TEST CODE
                                             DATE LAST CHANGED: INITIAL
-
-- - TEST-DESCRIPTION ---------- CODE QUALITY-LEVEL.
(01) VISUAL                      2A    LTPD: 20-0
(02) MECHANICAL DIM              2B    LTPD: 20-0
(03) MARKING                     2C    LTPD: 20-0
(04) SOLDERABILITY               2E    LTPD: 20-0
(05) RESISTANCE                  4NA    AQL:  0-650
(06) INDUCTANCE                  4ND   LTPD: 20-0
```

C. EXAMPLE OF TRF LISTING BY DIGITAL PART NUMBER

3.2 TEST METHODS

Incoming Inspection Test Methods (IITMs) describe the tests called for in the TRF. They may be supplemented (at plant discretion) by local procedures written to provide more detail on specific plant test equipment set-ups or to account for plant-specific requirements.

3.2.1 Organization

IITMs provide sufficient detail for a plant component engineer or senior incoming inspection technician to create a suitable test set-up for component parameter verification. IITMs are similar in structure and detail to test methods found in MIL-STD-202E. There is one IITM for each test code used in the TRF.

3.2.2 Format

The IITM format is shown in Figures 3 through 6.

Figure 3: Incoming Inspection Test Method Sample - (Sheet 1 of 4)

– II TEST METHOD 4TS 4–Mar–80 Page 1

TITLE: Test Method for LEAKAGE INDUCTANCE

ABSTRACT: This test Method is used to verify the total primary leakage inductance of a transformer.

DATE	ECO #	ORIGINATOR	APPROVED	REV
4–MAR–80		A. KOKIDKO	R.V.Yedavalli	A

Size	Code	Number	Rev
A	SP	ELCE059–TM–04TS	A

Figure 4: Incoming Inspection Test Method Sample - (Sheet 2 of 4)

– II TEST METHOD 4TS 4–Mar–80 Page 2

TABLE OF CONTENTS/REVISION STATUS

Para.	Title	Para. Rev.	Page
	Title Page	4–Mar–80	1
	Table of Contents/Revision Status	4–Mar–80	2
1.0	PURPOSE	4–Mar–80	3
2.0	DESCRIPTION OF METHOD	4–Mar–80	3
3.0	TEST APPARATUS	4–Mar–80	3
4.0	PROCEDURE	4–Mar–80	3
5.0	PASS/FAIL CRITERIA	4–Mar–80	4

Figure 5: Incoming Inspection Test Method Sample - (Sheet 3 of 4)

– II TEST METHOD 4TS 4–Mar–80 Page 3

1.0 PURPOSE

This method defines a means of verifying the total primary leakage inductance of a transformer.

2.0 DESCRIPTION OF METHOD

In this method, an inductance–measuring assembly is used to verify the leakage inductance of a transformer. With all of the secondary winding terminals connected together using the shortest leads possible, the primary winding inductance is measured while being excited by a signal operating at the specified frequency and magnitude.

3.0 TEST APPARATUS

The following test apparatus, or their equivalent, are needed to verify the leakage inductance value of a transformer

a. Inductance–Measuring Assembly, Model 1630; General Radio.

b. Test Leads, Rigid and Short. Leads should be no longer than 3.0 inches (7.6 cm).

4.0 PROCEDURE

a. Observe all of the safety precautions which normally apply to conventional electronic and electrical equipment, as well as the following specific items:

1. The test bench and stool must be constructed or covered with electrically non–conducting material.

2. Alligator type clips and other wire lead terminations must be protected with rubber boots or covers.

3. Equipment and other items in the vicinity of the test must be arranged so that an involuntary reflex action by the person performing the verification will not result in physical injury.

b. From the detailed specification, obtain the specified leakage inductance value, as well as the signal frequency and magnitude (voltage level).

Figure 6: Incoming Inspection Test Method Sample - (Sheet 4 of 4)

– II TEST METHOD 4TS 4–Mar–80 Page 4

c. Short the appropriate secondary windings as indicated in the specification using the shortest possible and heavy leads. If no specific secondary winding is identified, short all the secondary windings.

d. Using the short, rigid test leads, connect the ends of the primary winding to the inductance bridge portion of the inductance–measuring assembly.

e. Set the oscillator portion of the inductance–measuring assembly to the specified frequency and voltage level. If voltage level is not specified, use 1.0 Vrms.

f. Adjust the inductance bridge in accordance with the operating instructions provided with the inductance–measuring assembly and obtain the inductance value at the primary winding.

5.0 PASS/FAIL CRITERIA

The measured value of leakage inductance must not exceed the limit specified in the detailed purchase specification.

3.2.3 Document Control

The IITM document numbering system is A-SP-ELCE059-TM-0XXX where XXX is the three character IITM test code. Test code assignment, document creation, and document release are done by Central Specification Control Systems, NRO5/M2. Distribution of IITM hard copy is done by Standards and Methods Control.

4 INCOMING INSPECTION PROCEDURE CONTROL

Occasionally it is necessary to establish an Incoming Inspection Procedure (IIP) to supplement the (IITMs) or to fill a need not supported by the TRF/IITM system. This subhead establishes the method to be followed in generating, controlling, and distributing IIPs.

4.1 FORMS

The title page and continuation sheets are word processed (or typed) on form number EN-01217-16, *Incoming Inspection Procedure Title and Continuation Sheets - Form.* This form is available from Forms Administration, NRO2/C03, DTN: 234-4459. An alternate equivalent form or computer-generated format is acceptable.

4.2 DOCUMENTATION IDENTIFIER

The document identifier is assigned in accordance with the requirements of *DEC STD 012-0 Part Identification Standard,* and uses the "II" mnemonic code from *DEC STD 012-1 Unified Numbering Code - Mnemonic Drawing Codes.*

Example: The II document for part number 74-10875-01 becomes A-II-7410875-00-X where:

A = Drawing media designator per *DEC STD 013-0 Standard Engineering Drawing Formats and Forms - Introduction*

II = Incoming inspection document mnemonic per DEC STD 012-1

X = Next higher document number available

4.3 APPROVAL, DISTRIBUTION, AND STORAGE

The IIP is written, word processed (or typed), signed off, and forwarded to the appropriate organization for distribution and storage per the release procedure shown in Figure 7.

4.4 REVISION CONTROL

All revisions to IIPs shall be made on the Engineering Change Order form and be in accordance with *DEC STD 100-0 Introduction to Engineering Change Orders, DEC STD 100-1 Engineering Change Orders - Hardware,* and *DEC STD 100-2 Purchase Specification ECOs.*

4.5 INSPECTION PROCEDURE EXAMPLE

The example shown in Figures 8 through 11, entitled LA34 TRACTOR LEFT AND RIGHT, represents a typical Incoming Inspection Procedure. It contains the applicable information and establishes the acceptable format.

Figure 7: Incoming Inspection Procedure - Release Procedure

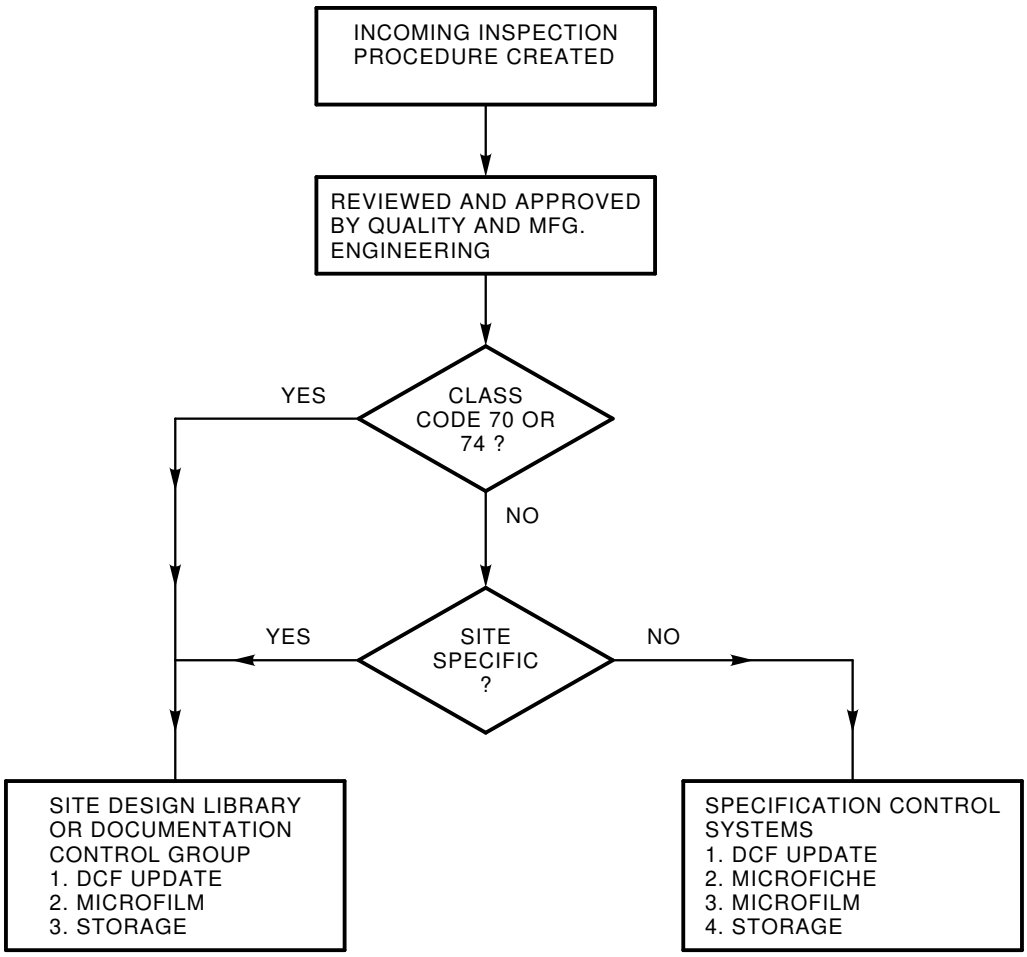


Figure 8: Incoming Inspection Procedure Example - Sheet 1 of 4

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

INSPECTION PROCEDURE

DATE 10/2/81

TITLE LA34 TRACTOR LEFT AND RIGHT **DRAWING REVISION B**

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	ORIGINAL RELEASE		G.KLEPPAN	10/2/81		

1.0 Applicable Document:
- 1.0.1 DEC Metals Quality Manual
- 1.0.2 DEC Standard 116
- 1.0.3 DEC Receiving Inspection Operational Procedure
- 1.0.4 Workmanship Specification 7665213-0-0

1.1 Inspection will be critical, major, minor and incidental characteristics when applicable. The A.Q.L.'s listed below shall apply unless otherwise specified. Parts must conform to Print.

1.2 Critical characteristics, as listed, will be inspected to an assigned A.Q.L. or by a special procedure for each characteristic.

1.3 Major characteristics, as listed, will be inspected on the entire 1.5% A.Q.L. sample size from each lot.

1.4 Minor characteristics, as listed, must be inspected on 20% of a 2.5% A.Q.L. sample size from each lot. If a defect is found, inspect and record that characteristic on the entire 2.5% A.Q.L. sample size.

1.5 All other characteristics will be considered "incidental" and must be inspected on 1% or one (1) piece, whichever is greater, of a 6.5% A.Q.L. sample size from each lot. If a defect is found, inspect and record that characteristic on the entire 6.5% A.Q.L. sample size.

1.6 Inspection Levels:
- 1.6.1 Prototype -- use Inspection Level II
- 1.6.2 Production Lots -- use Inspection Level I

1.7 Switching Procedure:
- 1..7.1 Normal to reduced after five (5) consecutive lots accepted.
- 1.7.2. Reduced to normal after one (1) lot rejected.
- 1.7.3 Normal to tightened after two (2) consecutive lots rejected.
- 1.7.4 Tightened to normal after three (3) consecutive lots accepted.

ENG	APPD	SIZE	CODE	NUMBER	REV
		A	II	1218685-0-1	A

EN-12838-03-R1077(332)

SHEET 1 OF 4

Figure 9: Incoming Inspection Procedure Example - Sheet 2 of 4

INSPECTION PROCEDURE CONTINUATION SHEET

TITLE: LA34 TRACTOR LEFT AND RIGHT

2.0 Critical Characteristics	Procedure
2.1 Flammability	Flame test per SP7665288. One defect rejects entire lot/batch.
3.0 Major Characteristics	Procedure
3.1 Package and Damage	Visual
3.2 Piece Part Identification	Visual on package
3.3 Certificate of Compliance	Certificate of Compliance must be filled with each lot batch received.
3.4 Color - Black	Visual
3.5 .2515 - .2535 Sq. hole	94-04747-3 Gage
3.6 Clamp Range .309 - .317	Pin Gages
3.7 Lateral Force 6 lbs.	.312 Pin Gage Chatillon Force Gage
3.8 Torque max. 3.0 ox/in.	94-04833-3 Automatic torque tester. Follow attached procedure sheets 3 of 4 and 4 of 4.

SIZE	CODE	NUMBER	REV
A	II	1218685-0-1	A

EN-1283A-2-03-R1077(332) **SHEET** 2 **OF** 4

Figure 10: Incoming Inspection Procedure Example - Sheet 3 of 4

INSPECTION PROCEDURE CONTINUATION SHEET

TITLE: LA34 TRACTOR LEFT AND RIGHT

PROCEDURE FOR USING THE TRACTOR TORQUE GAGE

Objective: This gage shall be used as a functional gage only. Only two (2) basic steps are necessary; setting the adjustments knob to 3 in. - ounce and testing the tractor for pass - fail.

1A. Place torque watch on threaded stem.

1.1 Place the round threaded stem on the drive shaft (See Figure 1.)

1.2 Set the option switch to Cont. (Continuous)

1.3 Holding the torque watch, turn the on/off switch located on the side of the panel to on.

1.4 Still holding the torque watch, turn the adjustment knob until the watch reads three (3) in. - ounces.

The instrument is now calibrated. This should be done each time the instrument is used, and periodically (every 10 times) during testing when testing\ several tractors at once.

1.5 Turn the instrument off and replace the threaded stem and torque watch with the square stem.

1.6 Carefully place the tractor to be tested on the square stem and stationary stem.

1.7 Make sure the tractor does not rest on the face of the instrument, and then lock it down with the tightener knob.

1.8 Turn the instrument on and observe for turning.

CRITERIA FOR PASS/FAIL

A) If the tractor does not turn, it fails.
B) If the tractor turns, it passes.
C) If the tractor sticks slightly, but still turns, it passes.
D) If the tractor turns slightly, but has a predominant stick, it fails.

Cuation: If, during testing the adjustment knob is accidentally bumped, rubbed, or turned, recalibrate the instrument!

NOTE: The volt/amp meter serves absolutely no purpose in this test and is not to be used for referencing the adjustment.

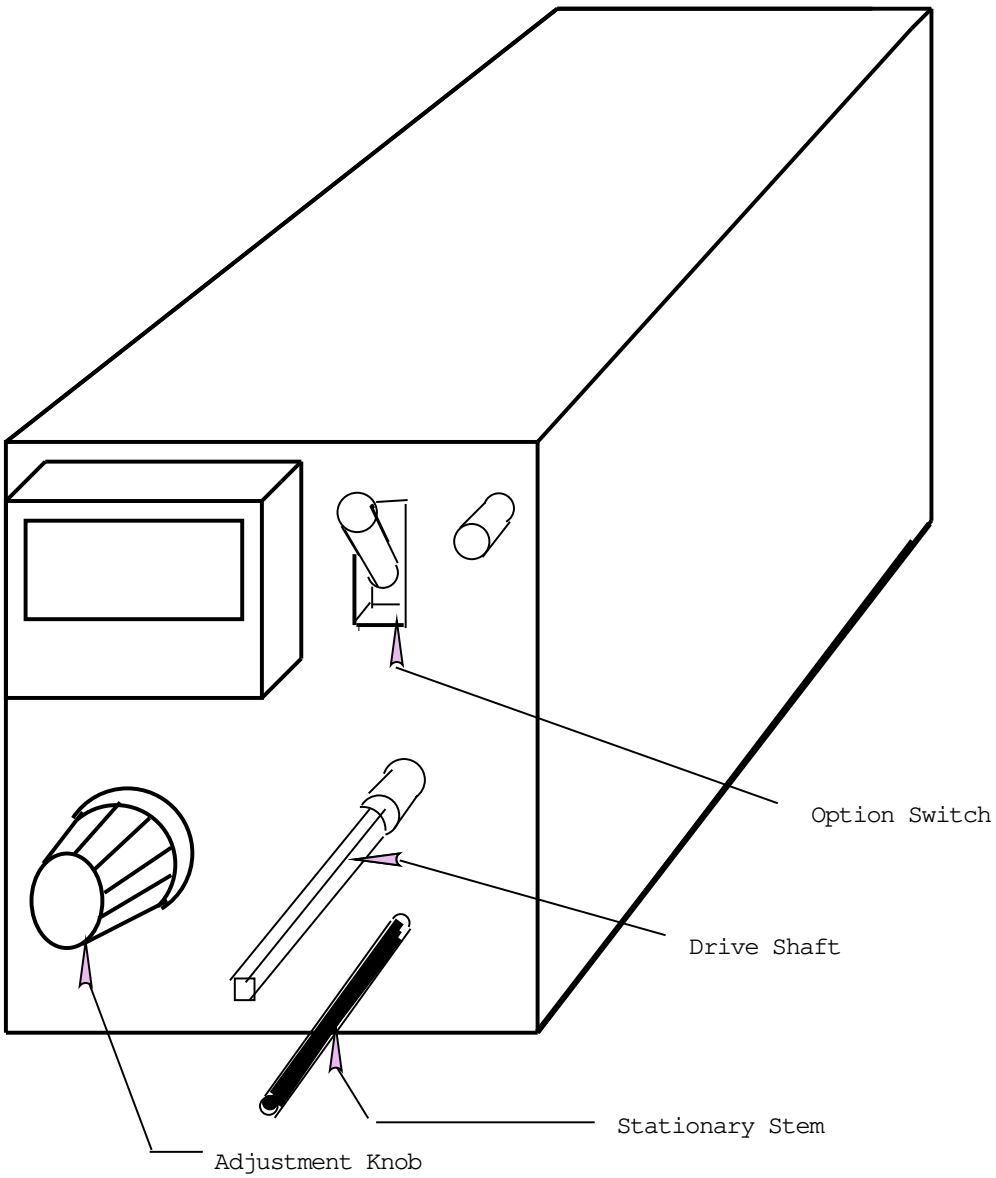
	SIZE	CODE	NUMBER	REV
	A	II	1218685-0-1	A

EN-1283A-2-03-R1077(332) **SHEET** 3 **OF** 4

Figure 11: Incoming Inspection Procedure Example - Sheet 4 of 4

INSPECTION PROCEDURE **CONTINUATION SHEET**

TITLE LA34 TRACTOR LEFT AND RIGHT



	SIZE	CODE	NUMBER	REV
	A	II	1218685-0-1	A

EN–1283A–2–03–R1077(332) **SHEET** 4 **OF** 4

APPENDIX A

REFERENCED DOCUMENTS

EL-Class Digital Documents

EL-Class Number	Document Title
EL-00012-00	*DEC STD 012-0 Part Identification Standard*
EL-00012-01	*DEC STD 012-1 Unified Numbering Code - Mnemonic Drawing Codes*
EL-00013-00	*DEC STD 013-0 Standard Engineering Drawing Formats and Forms - Introduction*
EL-00100-00	*DEC STD 100-0 Introduction to Engineering Change Orders*
EL-00100-01	*DEC STD 100-1 Engineering Change Orders - Hardware*
EL-00100-02	*DEC STD 100-2 Purchase Specification ECOs*
A-SP-7665326-00-0	*Manufacturing Systems Assessment (MSA) Procedure - Checklist*
A-SP-ELMF347-00-0	*Ship-to-Stock Supplier Qualification Program - Audit Guideline for Plant Quality Engineer*
A-SP-ELMF348-00-0	*Ship-To-Stock Supplier Qualification Program Basic Agreement and Release Procedure*
A-SP-ELCE059-TR-OTRF	*Incoming Inspection Test Requirement File*
A-SP-ELCE059-TM-0XXX	*Incoming Inspection Test Methods - where XXX is the three character IITM test code*

Copies of Digital EL-Class documents may be obtained from Standards and Methods Control, CTS1-2/D4, DTN: 287-3724, JOKUR::SMC, or via VTX SMC.

Please provide your name, mailstop, cost center, badge number, and node address when ordering.

A.1 Digital Forms

Digital Form Number	Document Title
EN-01217-16	*Incoming Inspection Procedure Title and Continuation Sheets - Form*

Forms are available from:

Forms Administration
NRO2-2/C03, 234-4459

A.2 Government Documents

Government Document Number	Document Title
MIL-STD 105D	*Sampling Procedures and Tables for Inspection by Attributes*
MIL-S-19500F	*General Specification for Semiconductor Devices*

Government documents are available from:

Navy Forms Center, 5802 Tabor Ave, Philadelphia, PA, 19120
Telephone: 215-697-2000 ext. 3321

```
+-------------------------------------------------------------------+
|                        READER COMMENTS                            |
|                                                                   |
| Your  comments  and suggestions  will help  Standards and Methods |
| Control improve their services and documents.                     |
+-------------------------------------------------------------------+
```

Did you request this document? _____ If so, did it arrive within a satisfactory period of time? _____ Please comment.

What are your impressions of this document? Consider format, organization, completeness, readability, and illustrations.

FOLD ON THIS LINE

Did you find technical or clerical errors in this document? If so, please specify the page number(s) and the error(s).

Are the instructions for the update package clear? _____
Was an index available? _____ If not, is one needed? _____
Do you have other suggestions for improving this document?

The following information is optional:

Name _____ Mailstop _____

Department _____ Node _____

Send your comments to JOKUR::PROJECTS, or fold, staple, and send this page through interoffice mail to:

```
+------------------------------+
|       READERS' COMMENTS      |
| STANDARDS AND METHODS CONTROL|
|          CTS1-2/D4           |
+------------------------------+
```